

10/589,814

=> d his

(FILE 'HOME' ENTERED AT 14:35:25 ON 22 DEC 2009)

FILE 'REGISTRY' ENTERED AT 14:35:32 ON 22 DEC 2009

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 25 S L1 SSS FUL

L4 25 S L3 AND CAPLUS/LC

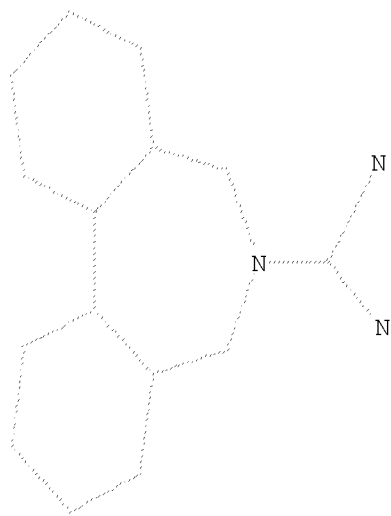
FILE 'CAPLUS' ENTERED AT 14:37:13 ON 22 DEC 2009

L5 13 S L3

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> d ibib abs hitstr total

L5 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:845440 CAPLUS

DOCUMENT NUMBER: 151:336783

TITLE: Enantioselective Henry (nitroaldol) reaction catalyzed by axially chiral guanidines

AUTHOR(S): Ube, Hitoshi; Terada, Masahiro

CORPORATE SOURCE: Department of Chemistry, Graduate School of Science, Tohoku University, Aoba-ku, Sendai, 980-8578, Japan

SOURCE: Bioorganic & Medicinal Chemistry Letters (2009), 19(14), 3895-3898

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The enantioselective activation of nitroalkanes was attempted on the basis of the complexation between chiral guanidinium and nitronate through two hydrogen bonds. The proposed enantioselective activation was applied to the diastereo- and enantioselective Henry (nitroaldol) reaction of nitroalkanes with aldehydes using axially chiral guanidine bases as the catalyst. Optically active nitroaldol products were obtained in acceptable yields with fairly good enantio- and diastereoselectivities at low temperature

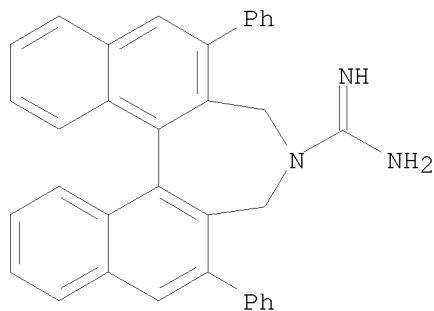
IT 862889-17-6 862889-18-7 862889-19-8
 862889-20-1 862889-21-2 862889-22-3
 862889-23-4 862889-24-5 1186130-42-6

RL: CAT (Catalyst use); USES (Uses)

(asym. synthesis of nitroalcs. via Henry reaction of nitroalkanes with aldehydes in the presence of axially chiral guanidines)

RN 862889-17-6 CAPLUS

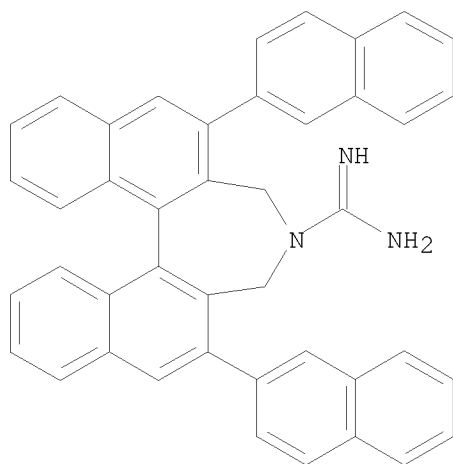
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 3,5-dihydro-2,6-diphenyl-, (11bR)- (9CI) (CA INDEX NAME)



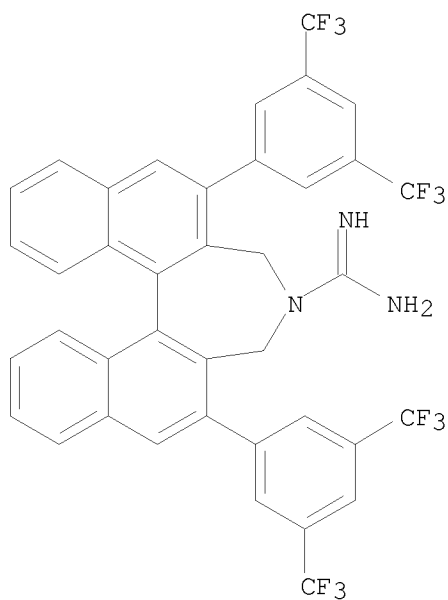
RN 862889-18-7 CAPLUS

CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 3,5-dihydro-2,6-di-2-naphthalenyl-, (11bR)- (9CI) (CA INDEX NAME)

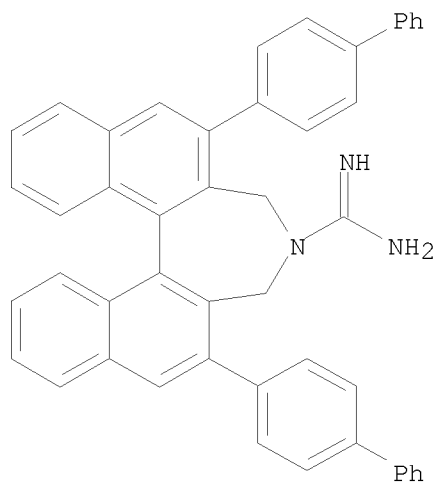
10/589,814



RN 862889-19-8 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
3,5-dihydro-2,6-bis[3,5-(trifluoromethyl)phenyl]-, (11bR)- (9CI) (CA
INDEX NAME)

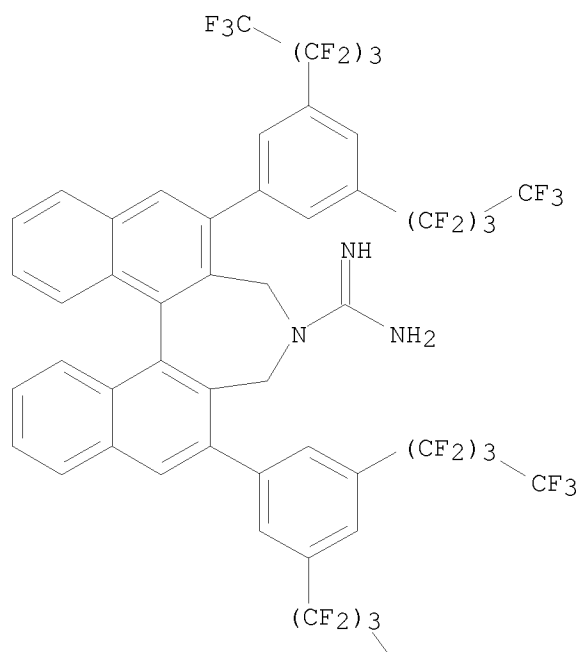


RN 862889-20-1 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
2,6-bis([1,1'-biphenyl]-4-yl)-3,5-dihydro-, (11bR)- (CA INDEX NAME)



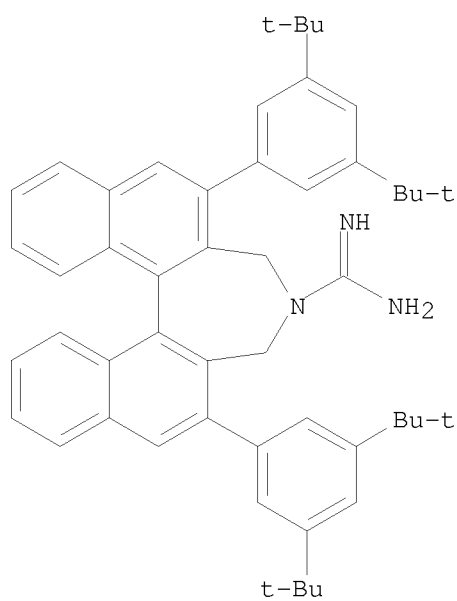
RN 862889-21-2 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 2,6-bis[3,5-bis(phenyl)phenyl]-3,5-dihydro-, (11bR)-(9CI) (CA
 INDEX NAME)

PAGE 1-A



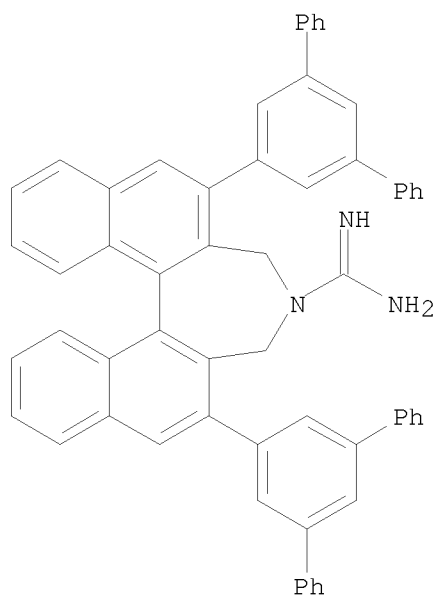


RN 862889-22-3 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 2,6-bis[3,5-bis(1,1-dimethylethyl)phenyl]-3,5-dihydro-, (11bR)- (9CI) (CA
 INDEX NAME)

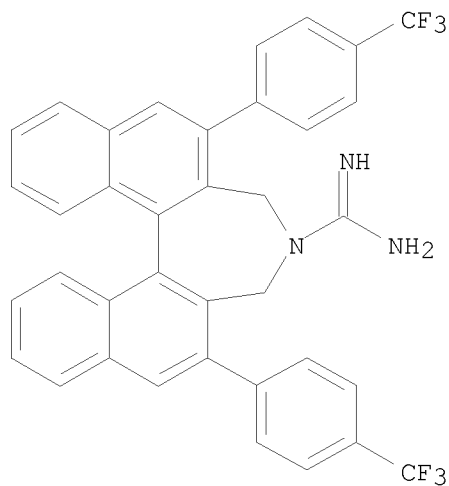


RN 862889-23-4 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 3,5-dihydro-2,6-bis([1,1':3',1''-terphenyl]-5'-yl)-, (11bR)- (CA INDEX
 NAME)

10/589,814

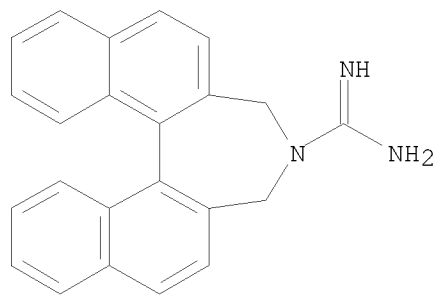


RN 862889-24-5 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
3,5-dihydro-2,6-bis[4-(trifluoromethyl)phenyl]-, (11bR)- (9CI) (CA INDEX
NAME)



RN 1186130-42-6 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide, 3,5-dihydro-, (11bR)-
(CA INDEX NAME)

10/589,814



OS.CITING REF COUNT: 1

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

REFERENCE COUNT: 56

THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:844930 CAPLUS

DOCUMENT NUMBER: 151:266892

TITLE: Acid-base dual-functional catalysis by axially chiral guanidine in enantioselective [3+2] cycloaddition of maleate to Schiff bases as a precursor of azomethine ylides

AUTHOR(S): Nakano, Megumi; Terada, Masahiro

CORPORATE SOURCE: Department of Chemistry, Graduate School of Science, Tohoku University, Aoba-ku, Sendai, 980-8578, Japan

SOURCE: Synlett (2009), (10), 1670-1674

CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The enantioselective [3+2] cycloaddn. of maleate with Schiff bases as azomethine ylide precursors was developed using axially chiral guanidine catalysts to provide optically active pyrrolidines. Acid-base dual-functional catalysis by an axially chiral guanidine through double H-bonding interaction is proposed to give the cycloadducts in good yields.

IT 862889-20-1 862889-23-4 921229-45-0

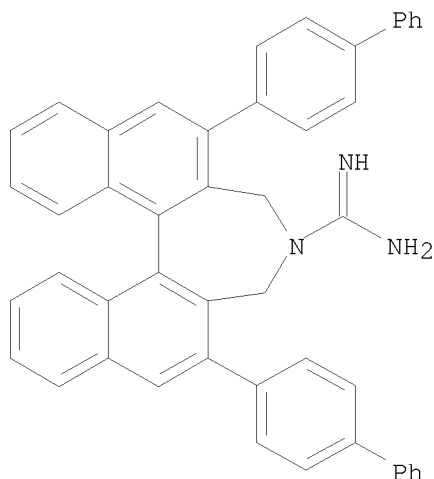
921229-46-1 921229-47-2

RL: CAT (Catalyst use); USES (Uses)

(preparation of pyrrolidines by asym. cycloaddn. of maleate to Schiff bases as azomethine ylide precursors using axially chiral guanidine catalyst)

RN 862889-20-1 CAPLUS

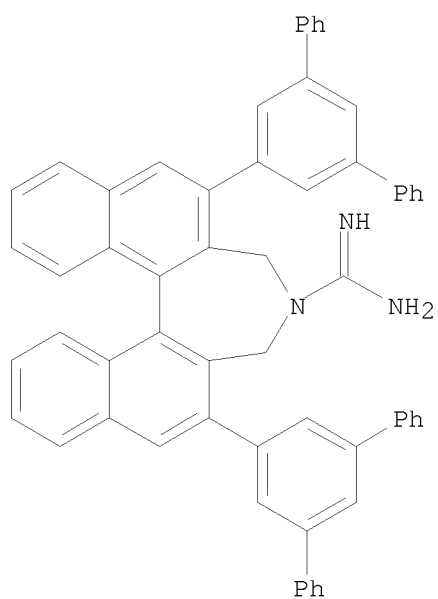
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
2,6-bis([1,1'-biphenyl]-4-yl)-3,5-dihydro-, (11bR)- (CA INDEX NAME)



RN 862889-23-4 CAPLUS

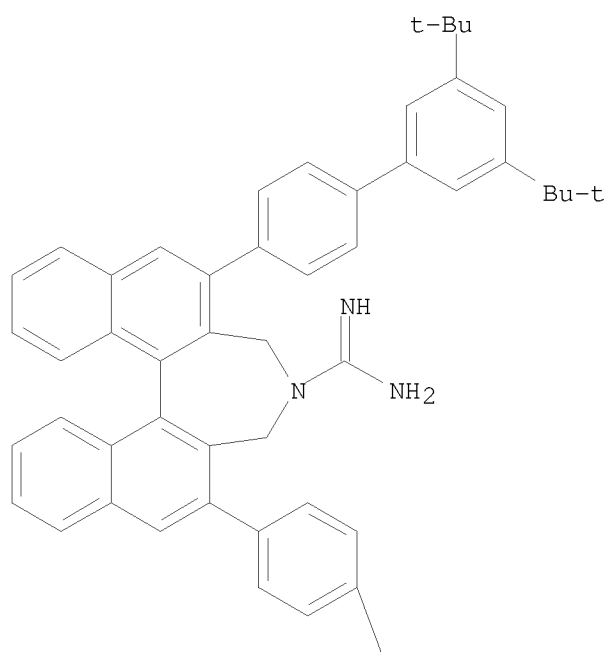
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
3,5-dihydro-2,6-bis([1,1':3',1''-terphenyl]-5'-yl)-, (11bR)- (CA INDEX NAME)

10/589,814

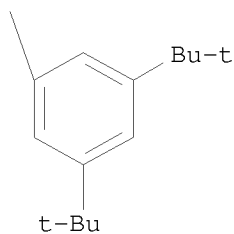


RN 921229-45-0 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
2,6-bis[3',5'-bis(1,1-dimethylethyl)[1,1'-biphenyl]-4-yl]-3,5-dihydro-,
(11bR)- (CA INDEX NAME)

PAGE 1-A

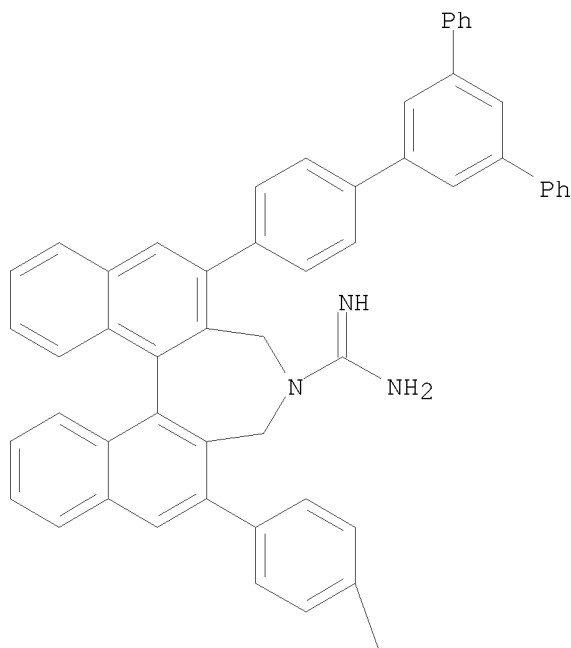


PAGE 2-A

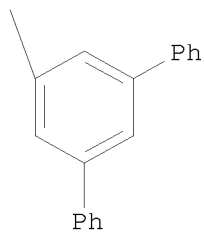


RN 921229-46-1 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 3,5-dihydro-2,6-bis(5'-phenyl[1,1',3',1''-terphenyl]-4-yl)-, (11bR)- (CA
 INDEX NAME)

PAGE 1-A

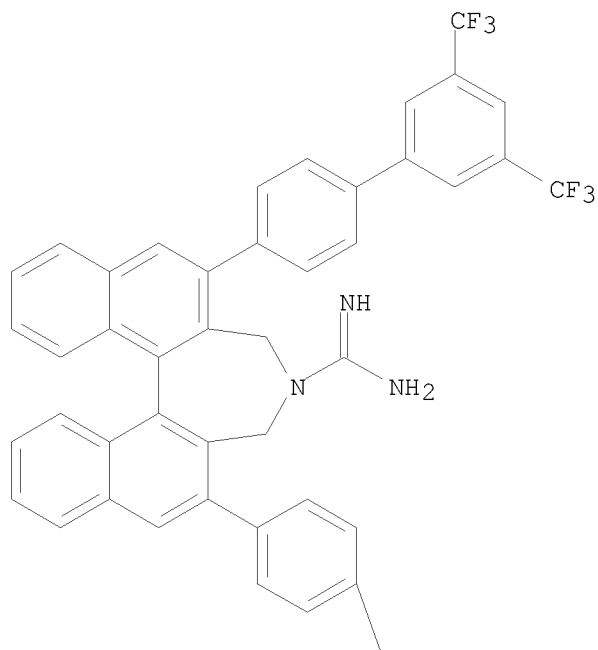


PAGE 2-A

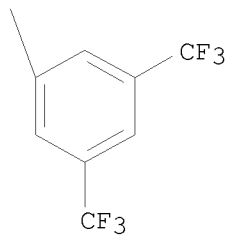


RN 921229-47-2 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 2,6-bis[3',5'-bis(trifluoromethyl)[1,1'-biphenyl]-4-yl]-3,5-dihydro-,
 (11bR)- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



10/589,814

OS.CITING REF COUNT:	3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT:	71	THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:527744 CAPLUS

DOCUMENT NUMBER: 151:448018

TITLE: The practical synthesis of double axial chiral guanidines

AUTHOR(S): Guo, Qun-Sheng; Du, Da-Ming

CORPORATE SOURCE: Beijing National Laboratory for Molecular Sciences (BNLMS), Key Laboratory of Bioorganic Chemistry and Molecular Engineering, College of Chemistry and Molecular Engineering, Peking University, Beijing, 100871, Peop. Rep. China

SOURCE: Letters in Organic Chemistry (2009), 6(3), 197-202
CODEN: LOCEC7; ISSN: 1570-1786

PUBLISHER: Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Two novel double axial chiral guanidines were designed according to the concept of double axial chirality. Practical synthetic procedures from (S)-1,1'-binaphthol have been developed. The title compds. were fully characterized by NMR, MS, IR and elemental anal. or HRMS. The two chiral guanidines can be interesting catalysts for asym. catalysis and preliminary asym. catalytic activity was investigated in Henry reaction and conjugate addition

IT 1190368-96-7P

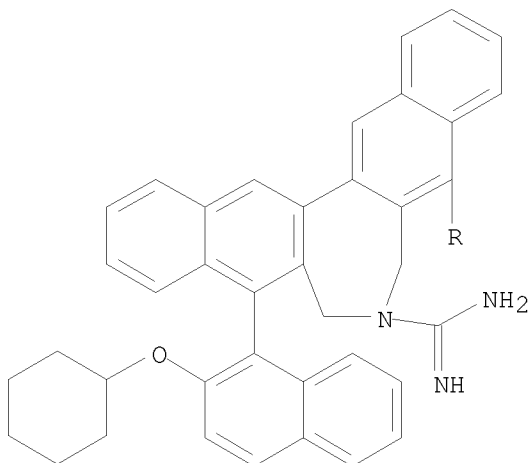
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
USES (Uses)

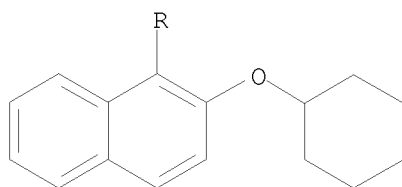
(synthesis of double axial chiral guanidines based on binaphthol as catalysts for stereoselective Henry and conjugate addition reactions)

RN 1190368-96-7 CAPLUS

CN 7H-Dinaphth[2,3-c:2',3'-e]azepine-7-carboximidamide,
5,9-bis[2-(cyclohexyloxy)-1-naphthalenyl]-6,8-dihydro-, (5S,9S)- (CA
INDEX NAME)

PAGE 1-A





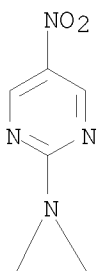
REFERENCE COUNT:

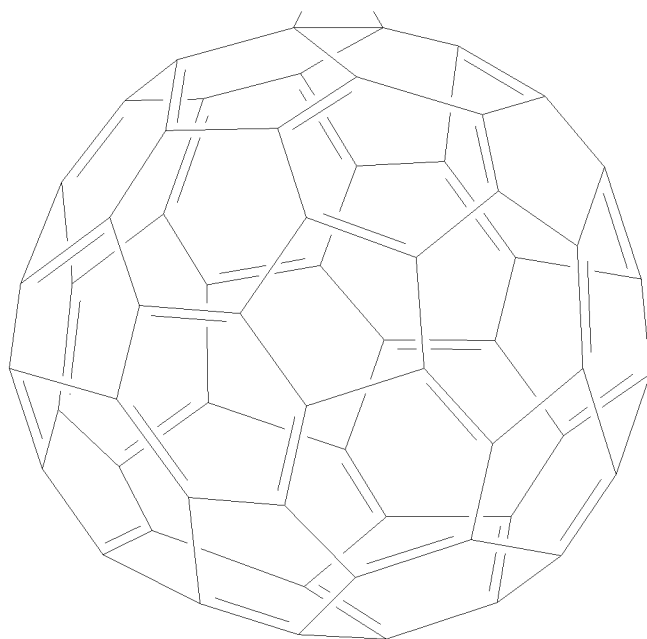
28

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1167756 CAPLUS
DOCUMENT NUMBER: 150:190816
TITLE: Stable and Unstable 6,6- and 5,6- Closed and Open Adducts of Fullerene C60
AUTHOR(S): Zverev, V. V.; Kovalenko, V. I.
CORPORATE SOURCE: A.E. Arbuzov Institute of Organic and Physical Chemistry, RAS, Kazan, Russia
SOURCE: Fullerenes, Nanotubes, and Carbon Nanostructures (2008), 16(5-6), 563-566
CODEN: FNCNAR; ISSN: 1536-383X
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB DFT/PBE/TZ2P research of total energy of various adducts at variation of 5,6- and 6,6- bond was carried out. On the basis of the anal. of local min., the conclusion on structures stability and instability was drawn. Acyclic and cyclic derivs. containing 4-6-membered rings are established to form the closed adducts only. Thus the [6,6]-closed structures are 15-18 kcal/mol more stable than [5,6]-closed. The [6,6]-closed adducts with strained 3-membered cycles and their [5,6]-open isomers are found to be stable. The anal. of strain energy is accomplished.
IT 574002-41-8
RL: PRP (Properties)
(stable and unstable 6,6- and 5,6- closed and open adducts of fullerene C60)
RN 574002-41-8 CAPLUS
CN 1'H-[5,6]Fullereno-C60-Ih-[1,9-b]azirine, 1'-(5-nitro-2-pyrimidinyl)- (CA INDEX NAME)

PAGE 1-A





REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:1069375 CAPLUS

DOCUMENT NUMBER: 148:33366

TITLE: Structure and relative energies of regioisomers and valence isomers of C60 adducts. HF and DFT study

AUTHOR(S): Zverev, Vladislav V.; Kovalenko, Valeriy I.; Romanova, Irina P.; Sinyashin, Oleg G.

CORPORATE SOURCE: A.E. Arbuzov Institute of Organic and Physical Chemistry, Kazan Research Centre, Russian Academy of Sciences, Kazan, 420088, Russia

SOURCE: International Journal of Quantum Chemistry (2007), 107(13), 2442-2453

CODEN: IJQCB2; ISSN: 0020-7608

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fullerene C60 and N-bridged C60NH regioisomeres are investigated by HF and DFT methods with BLYP, B3LYP and PBE functionals at the 6-31G**, 6-311G** and TZ2P levels. Method DFT/PBE/TZ2P, providing the good compliance with exptl. results, is chosen. Cross-sections of potential energy surface of adducts at a variation of 5,6- or 6,6- bonds lengths are investigated. It is shown, that C60C2H4NH and C60H2 are characterized by local min. for [5,6]-closed forms, whereas local min. for [5,6]-open forms are absent. Absence of stable conformations of the [5,6]-closed forms of methanofullerenes and aziridinofullerenes is a consequence of strain energy in three-membered rings. It is shown that relative stability of the regioisomers depends on the lengths of single or double bonds of monoadducts participating in reactions. The coordinated change of relative energies of the open and closed isomers N-bridged mono-(C60NR 1-7) and bis-adducts (C60(NR)2 8-14) is revealed. The [6,6]-closed form is more stable for compds. C60NR (2,3) and cis-1-C60(NR)2 (9,10) (R = Me, Ph), while [5,6]-open and cis-1 [6,6]-open forms are more stable for compds. C60NR (6,7) and cis-1-C60(NR)2 (13,14) (R = COOMe, R* - nitropyrimidine), what has been confirmed by experiment The factors defining relative isomer stability are investigated.

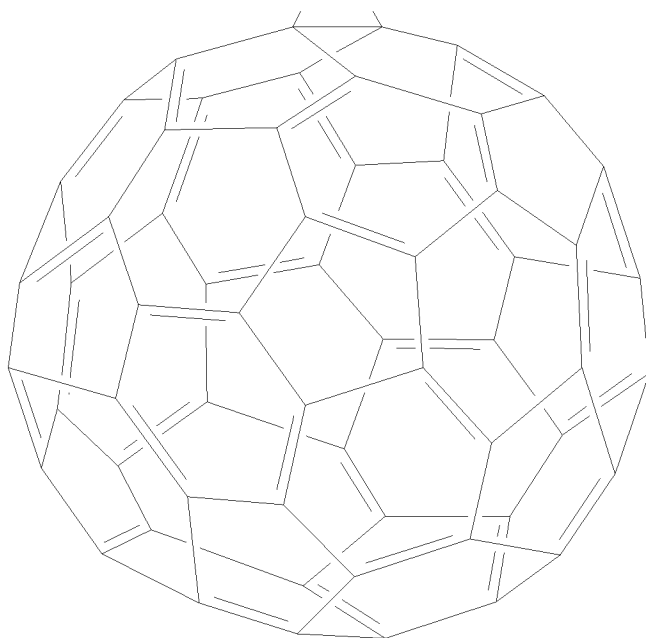
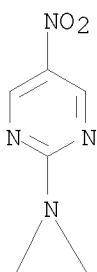
IT 574002-41-8 574002-44-1 944323-06-2
959473-01-9

RL: PRP (Properties)

(structure and relative energies of regioisomers and valence isomers of C60 adducts)

RN 574002-41-8 CAPLUS

CN 1'H-[5,6]Fullereno-C60-Ih-[1,9-b]azirine, 1'-(5-nitro-2-pyrimidinyl)- (CA INDEX NAME)

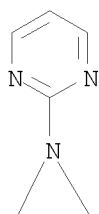


RN 574002-44-1 CAPLUS
 CN 1'H-[5,6]Fullereno-C60-Ih-[1,9-b]azirine, 1'-(2-pyrimidinyl)- (CA INDEX

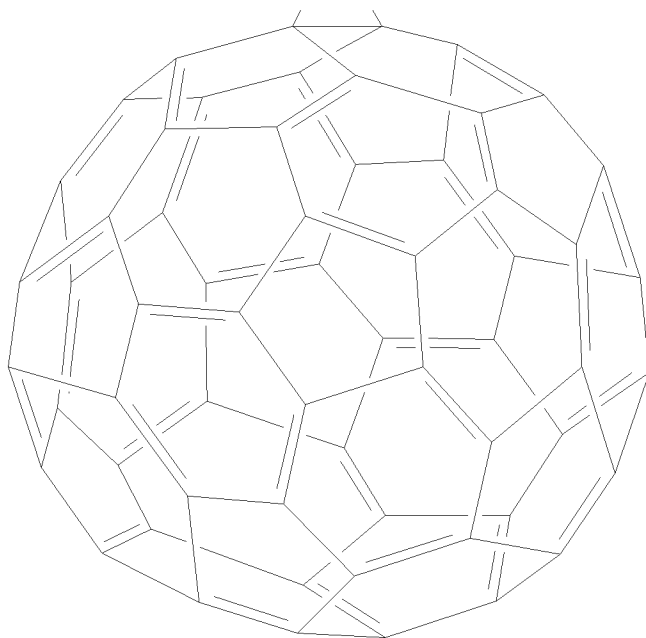
10/589,814

NAME)

PAGE 1-A



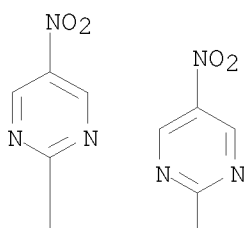
PAGE 2-A



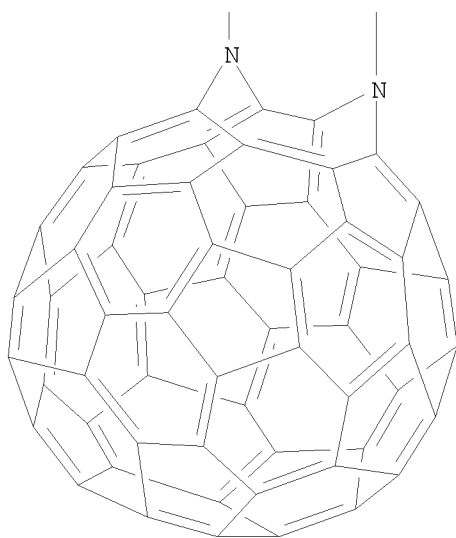
10/589,814

RN 944323-06-2 CAPLUS
CN 9a,12a-Diaza-1,9(9a):2,12(12a)-dihomo[5,6]fullerene-C60-Ih,
9a,12a-bis(5-methyl-2-pyrimidinyl)- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

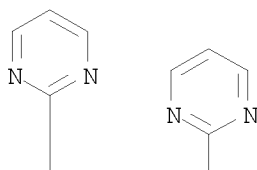


RN 959473-01-9 CAPLUS

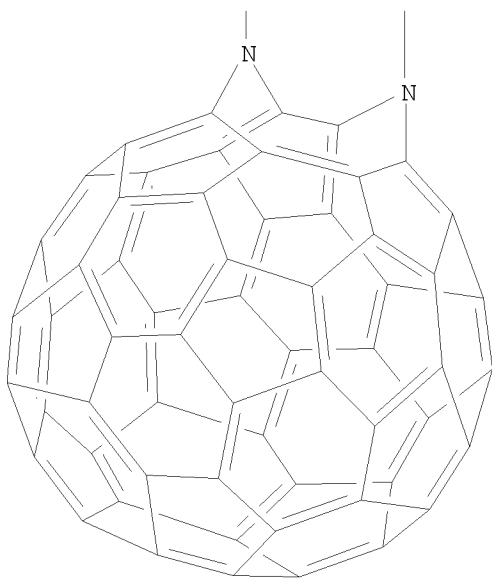
10/589,814

CN 9a,12a-Diaza-1,9(9a):2,12(12a)-dihomo[5,6]fullerene-C60-Ih,
9a,12a-di-2-pyrimidinyl- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

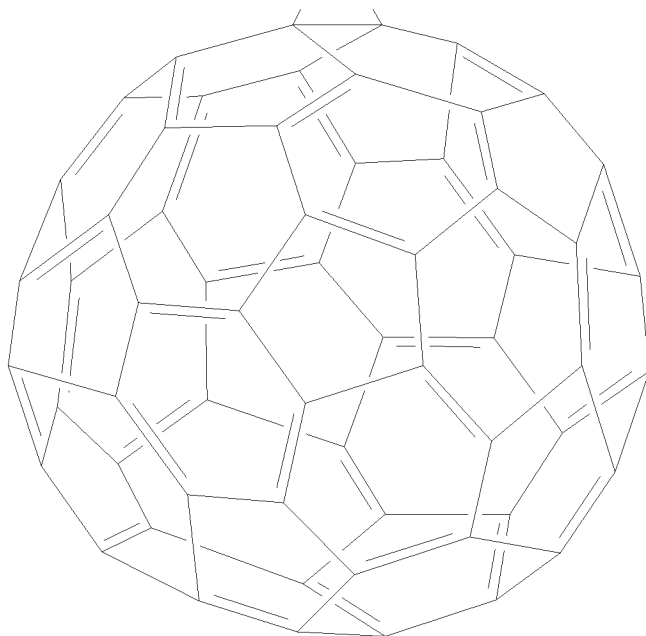
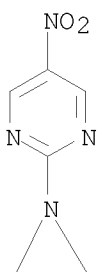


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

10/589,814

REFERENCE COUNT:	52	(1 CITINGS) THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
------------------	----	---

L5 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:110756 CAPLUS
DOCUMENT NUMBER: 147:188674
TITLE: Synthesis and unusual electrochemical properties of
nitropyrimidine-substituted
diazadihomo(C60-Ih)[6,6]fullerene
AUTHOR(S): Romanova, Irina P.; Yusupova, Gulshat G.; Larionova,
Olga A.; Nafikova, Adilya A.; Yakhvarov, Dmitry G.;
Zverev, Vladislav V.; Efremov, Yury Ya.; Sinyashin,
Oleg G.
CORPORATE SOURCE: A. E. Arbuzov Institute of Organic and Physical
Chemistry, Kazan Scientific Centre of the Russian
Academy of Sciences, Kazan, 420088, Russia
SOURCE: Mendelev Communications (2006), (6), 309-311
CODEN: MENCEX; ISSN: 0959-9436
PUBLISHER: Russian Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 147:188674
AB A bisadduct regioisomer with two open transannular [6,6]-bonds was
synthesized by the cycloaddn. reaction of C60 and
2-azido-5-nitropyrimidine.
IT 574002-41-8
RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT
(Reactant); PROC (Process); RACT (Reactant or reagent)
(failed cycloaddn. reaction with 2-azido-5-nitropyrimidine and
electroredn.; synthesis of nitropyrimidine-substituted
diazadihomo(C60-Ih)[6,6]fullerene by cycloaddn. of
2-azido-5-nitropyrimidine with C60 and its electroredn.)
RN 574002-41-8 CAPLUS
CN 1'H-[5,6]Fullereno-C60-Ih-[1,9-b]azirine, 1'-(5-nitro-2-pyrimidinyl)- (CA
INDEX NAME)



IT 944323-06-2P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); RCT

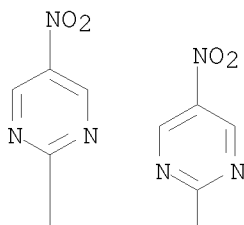
10/589,814

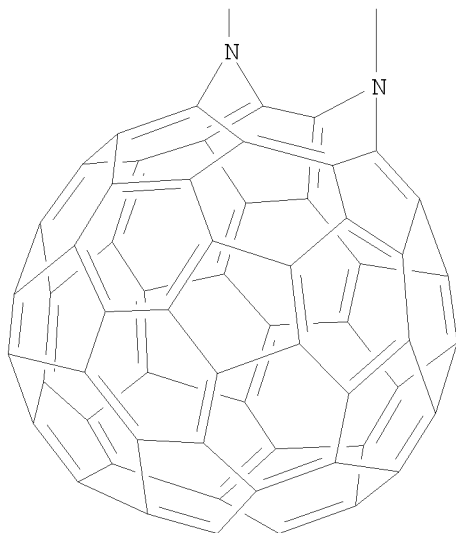
(Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC
(Process); RACT (Reactant or reagent)
(preparation, structural characterization, and electroredn.; synthesis of
nitropyrimidine-substituted diazadihomo(C60-Ih)[6,6]fullerene by
cycloaddn. of 2-azido-5-nitropyrimidine with C60 and its electroredn.)

RN 944323-06-2 CAPLUS

CN 9a,12a-Diaza-1,9(9a):2,12(12a)-dihomo[5,6]fullerene-C60-Ih,
9a,12a-bis(5-methyl-2-pyrimidinyl)- (CA INDEX NAME)

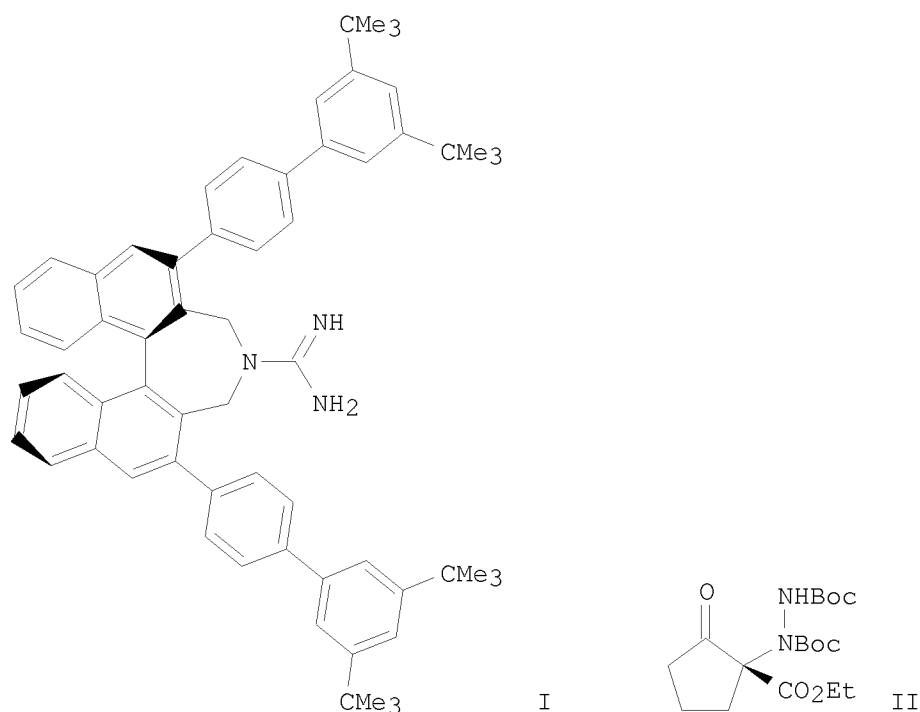
PAGE 1-A





OS.CITING REF COUNT:	3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT:	23	THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2006:1250291 CAPLUS
 DOCUMENT NUMBER: 146:184341
 TITLE: Axially Chiral Guanidine as Highly Active and
 Enantioselective Catalyst for Electrophilic Amination
 of Unsymmetrically Substituted 1,3-Dicarbonyl
 Compounds
 AUTHOR(S): Terada, Masahiro; Nakano, Megumi; Ube, Hitoshi
 CORPORATE SOURCE: Department of Chemistry, Graduate School of Science,
 Tohoku University, Sendai, 980-8578, Japan
 SOURCE: Journal of the American Chemical Society (2006),
 128(50), 16044-16045
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 146:184341
 GI



AB Nonracemic axially chiral guanidines such as dinaphthoazepineamidine I are prepared; I is an effective catalyst for the enantioselective addition of β -oxoesters and a 1,3-diketone to di-tert-Bu azodicarboxylates to yield α -hydrazino- β -oxoesters and an α -hydrazino- β -diketone in 54-99% yields and in 15-98% ee (all but three of the twelve examples give products in 83-98% ee). For example, stirring Et 2-oxocyclopentanecarboxylate and di(tert-butyl)

azodicarboxylate in THF in the presence of 0.05 mol% I for 4 h at -60° provides II [Boc = Me₃COC(:O)] in quant. yield and in 97% ee. Dinaphthoazepineamidines with other substituted Ph groups at the 3,3'-positions give addition/amination products in lower rates and enantioselectivities. I is prepared in six steps from (R)-2,2'-dimethyl-3,3'-binaphthalenediol ditriflate, 4-methoxyphenylboronic acid, and 3,5-di(tert-butyl)phenylboronic acid. The absolute stereochemistries of three of the products are determined by their conversions to known oxazolidinones.

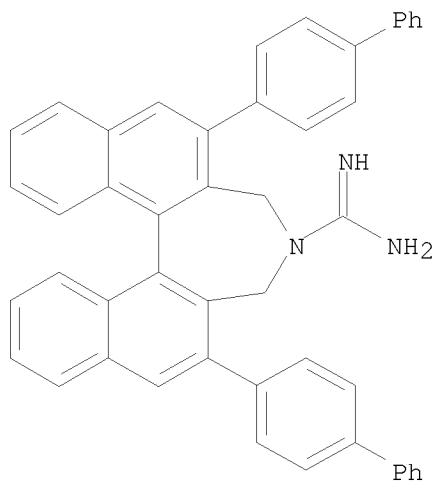
IT 862889-20-1P 862889-23-4P 921229-46-1P
921229-47-2P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
USES (Uses)

(dinaphthoazepineamidine prepared and tried as a catalyst for the enantioselective addition of Et 2-oxocyclopentanecarboxylate to di(tert-butyl) azodicarboxylate to yield a nonracemic α -hydrazino- β -ketoester)

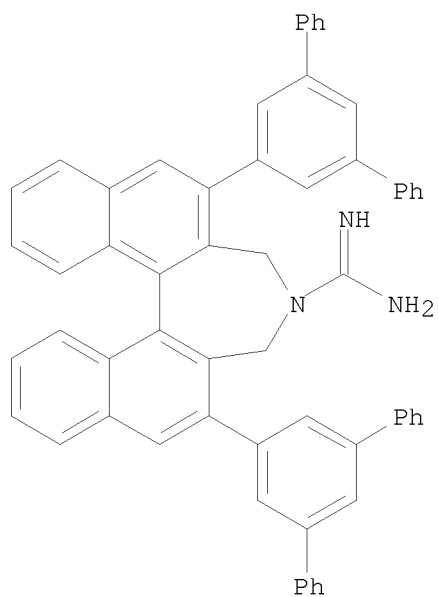
RN 862889-20-1 CAPLUS

CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
2,6-bis([1,1'-biphenyl]-4-yl)-3,5-dihydro-, (11bR)- (CA INDEX NAME)



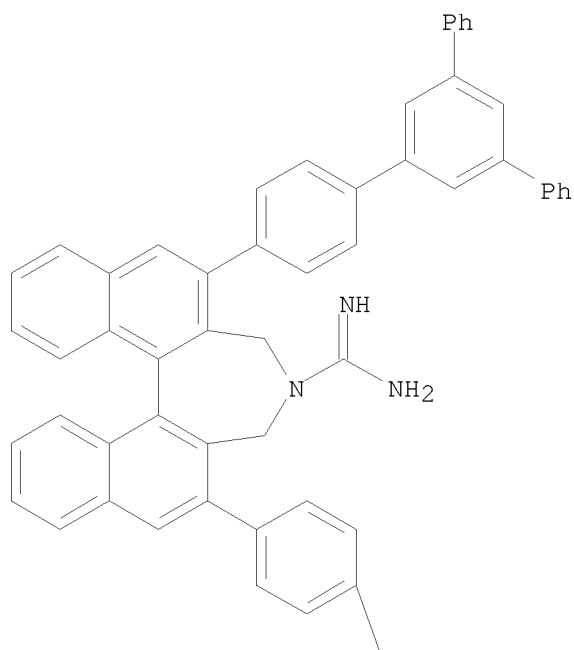
RN 862889-23-4 CAPLUS

CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
3,5-dihydro-2,6-bis([1,1':3',1''-terphenyl]-5'-yl)-, (11bR)- (CA INDEX NAME)

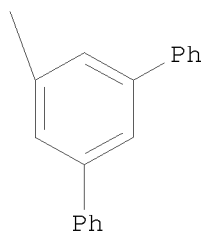


RN 921229-46-1 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 3,5-dihydro-2,6-bis(5'-phenyl[1,1',3',1''-terphenyl]-4-yl)-, (11bR)- (CA
 INDEX NAME)

PAGE 1-A

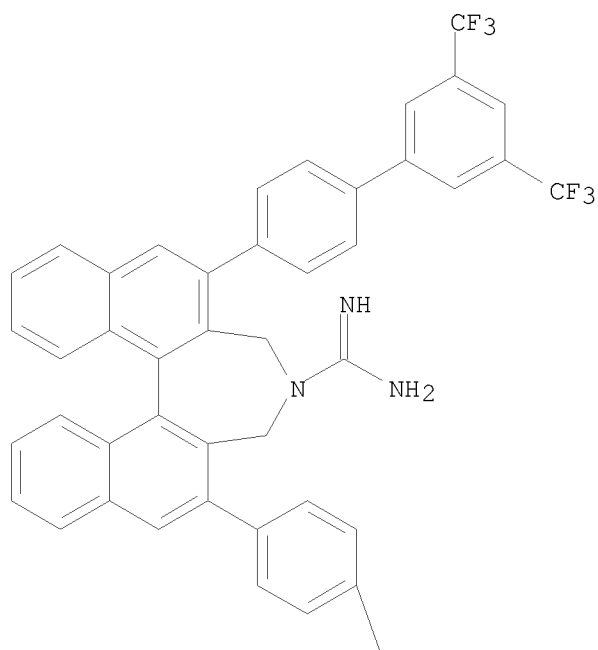


PAGE 2-A

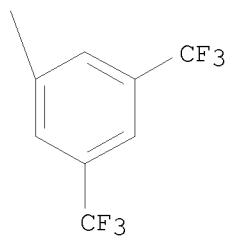


RN 921229-47-2 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 2,6-bis[3',5'-bis(trifluoromethyl)[1,1'-biphenyl]-4-yl]-3,5-dihydro-,
 (11bR)- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



IT 921229-45-0P

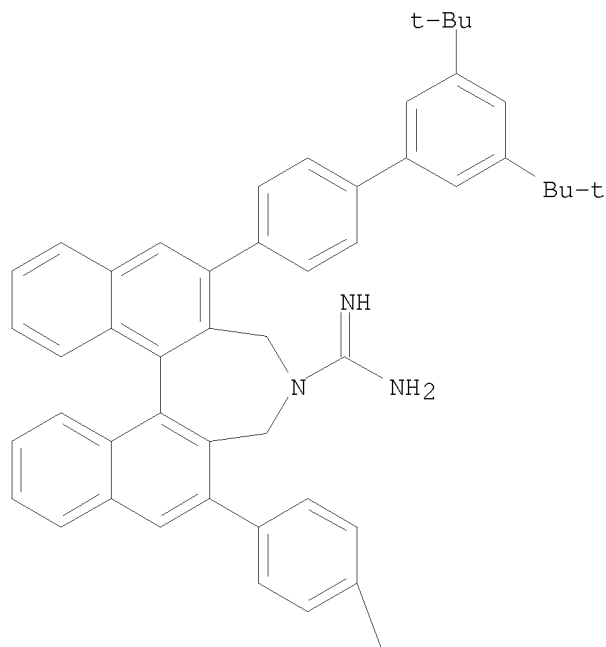
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
 USES (Uses)

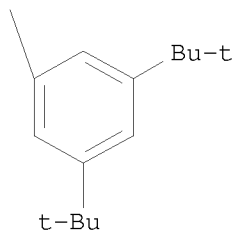
(preparation of a dinaphthoazepineamidine and its use as a catalyst for the
 enantioselective addition of 1,3-dicarbonyl compds. to azodicarboxylates
 to yield α -hydrazino- β -oxoesters and an
 α -hydrazino- β -diketone)

RN 921229-45-0 CAPLUS

CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 2,6-bis[3',5'-bis(1,1-dimethylethyl)[1,1'-biphenyl]-4-yl]-3,5-dihydro-,
 (11bR)- (CA INDEX NAME)

PAGE 1-A





OS.CITING REF COUNT:	60	THERE ARE 60 CAPLUS RECORDS THAT CITE THIS RECORD (61 CITINGS)
REFERENCE COUNT:	37	THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:796909 CAPLUS

DOCUMENT NUMBER: 147:166276

TITLE: Synthesis, electrochemical properties, and thermal transformations of

AUTHOR(S): 1-(5-nitro-2-pyrimidinyl)[60]fullereno[1,2-b]aziridine
Romanova, I. P.; Yusupova, G. G.; Larionova, O. A.;

Balandina, A. A.; Latypov, Sh. K.; Zverev, V. V.;

CORPORATE SOURCE: Yakhvarov, D. G.; Rusinov, G. L.; Sinyashin, O. G.

A. E. Arbuzov Institute of Organic and Physical
Chemistry, Kazan Research Center, Russian Academy of
Sciences, Kazan, 420088, Russia

SOURCE: Russian Chemical Bulletin (2006), 55(3), 502-506

CODEN: RCBUEY; ISSN: 1066-5285

PUBLISHER: Springer

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:166276

AB The reaction of fullerene C60 with 2-azido-5-nitropyrimidine afforded
1-(5-nitro-2-pyrimidinyl)[60]fullereno[1,2-b]aziridine, whose electrochem.
reduction proceeds more easily than the reduction of non-modified C60.

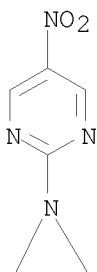
IT 574002-41-8P

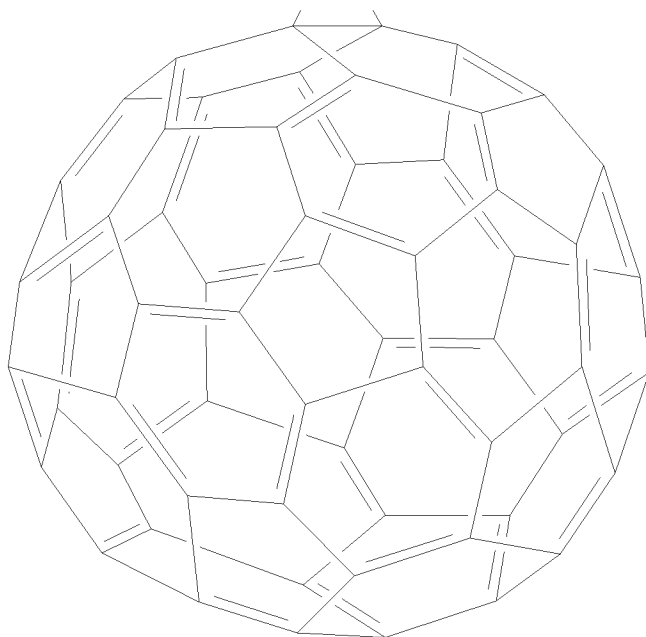
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of [(nitro)pyrimidinyl]fullereno[1,2-b]aziridine derivs. and
study of their electrochem. properties and thermal transformation)

RN 574002-41-8 CAPLUS

CN 1'H-[5,6]Fullereno-C60-Ih-[1,9-b]azirine, 1'-(5-nitro-2-pyrimidinyl)- (CA
INDEX NAME)

PAGE 1-A





OS.CITING REF COUNT:	3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT:	21	THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:902859 CAPLUS

DOCUMENT NUMBER: 143:229737

TITLE: Preparation of optically active bi-aryl guanidine compounds as catalysts for asymmetric reactions

INVENTOR(S): Terada, Masahiro; Ube, Hitoshi; Yokoyama, Shigeko; Shimizu, Hideo

PATENT ASSIGNEE(S): Takasago International Corporation, Japan

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

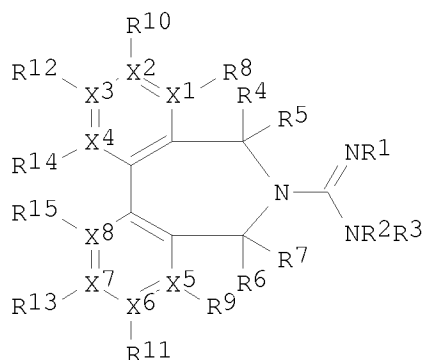
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005077908	A1	20050825	WO 2005-JP1943	20050209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20080154036	A1	20080626	US 2006-589814	20060921
PRIORITY APPLN. INFO.:			JP 2004-41181	A 20040218
			WO 2005-JP1943	W 20050209

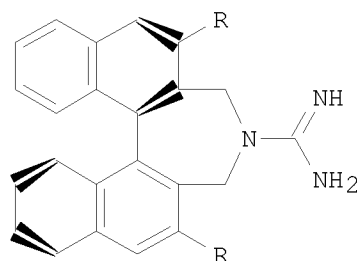
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 143:229737

GI



I



II

AB Guanidine compds. which have a bi-aryl skeleton represented by the following general formula (I) [wherein R1-R3 = H, each (un)substituted hydrocarbon or heterocyclic group; R4, R15 = H, HO, CO2H, acyl, each (un)substituted hydrocarbon, heterocyclic, alkoxy, aryloxy,

alkoxycarbonyl, aryloxycarbonyl, carbamoyl, alkylthiocarbonyl, arylthiocarbonyl, alkylthio, arylthio, or amino group, or substituted silyl group, or in any combination of R1 to R15, these substituents may together bind with each other to form a ring; X1-X8 = carbon or nitrogen atom, with the proviso that each of X1 to X8 has no substituent when it is nitrogen] are prepared. The above guanidine compds. are useful as catalysts for a variety of asym. reactions such as asym. nucleophilic addition reaction, asym. Michael addition reaction, asym. epoxidn., and asym. nitro aldol reaction (Henry reaction). Thus, 0.48 g guanidine hydrochloride was neutralized by Amberlite IRA-400 (OH-) and eluted out by ethanol to give ethanol solution of guanidine (5 mL) which was added to a solution of 0.3 g (R)-3,3'-diphenyl-2,2'-bis(bromomethyl)-1,1'-binaphthyl in 5 mL THF. The resulting mixture was heated at 50° and treated with 1 M aqueous HCl solution after the binaphthyl derivative disappeared on TLC to give, after

workup

and silica gel chromatog., 80% 4,5-dihydro-3H-dinaphth[2,1-c:1',2'-e]azepine-4-carboxamide derivative (II) (R = Ph). A mixture of guanidine compound II [R = 3,5-bis(trifluoromethyl)phenyl] (7.6 mg), 1 mL THF, and 20.3 μ L was cooled to -40°, treated dropwise with 108 μ L nitromethane, and stirred 23 h, and quenched by adding 1 M HCl/MeOH solution to give, after workup and silica gel chromatog., 95% (S)-2-nitro-1-phenylethanol (46% ee) (asym. nitro aldol reaction).

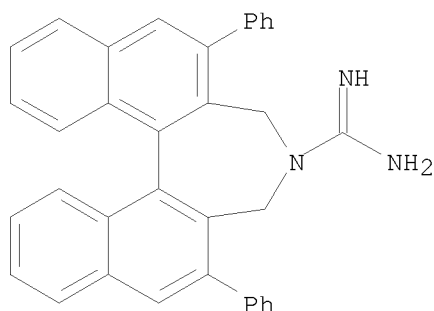
IT 862889-17-6P 862889-18-7P 862889-19-8P
862889-20-1P 862889-21-2P 862889-22-3P
862889-23-4P 862889-24-5P 862889-25-6P
862889-26-7P 862889-27-8P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
USES (Uses)

(preparation of optically active guanidine compds. as catalysts for asym. reactions)

RN 862889-17-6 CAPLUS

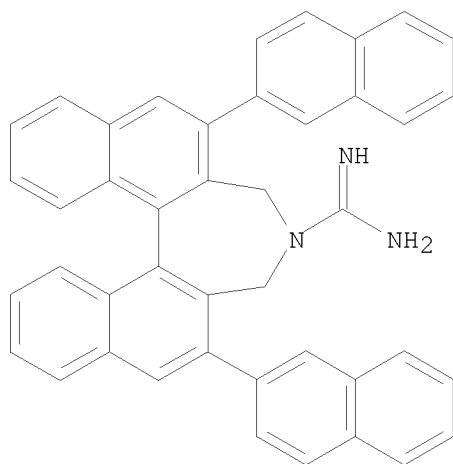
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
3,5-dihydro-2,6-diphenyl-, (11bR)- (9CI) (CA INDEX NAME)



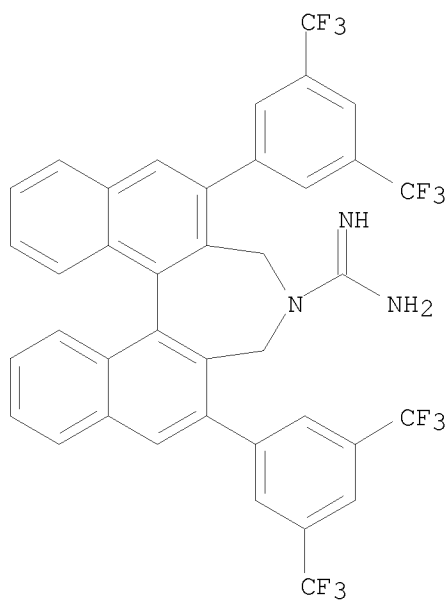
RN 862889-18-7 CAPLUS

CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
3,5-dihydro-2,6-di-2-naphthalenyl-, (11bR)- (9CI) (CA INDEX NAME)

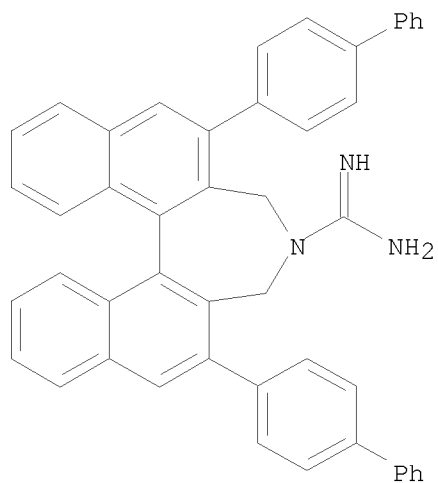
10/589,814



RN 862889-19-8 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
3,5-dihydro-2,6-bis[3,5-(trifluoromethyl)phenyl]-, (11bR)- (9CI) (CA
INDEX NAME)

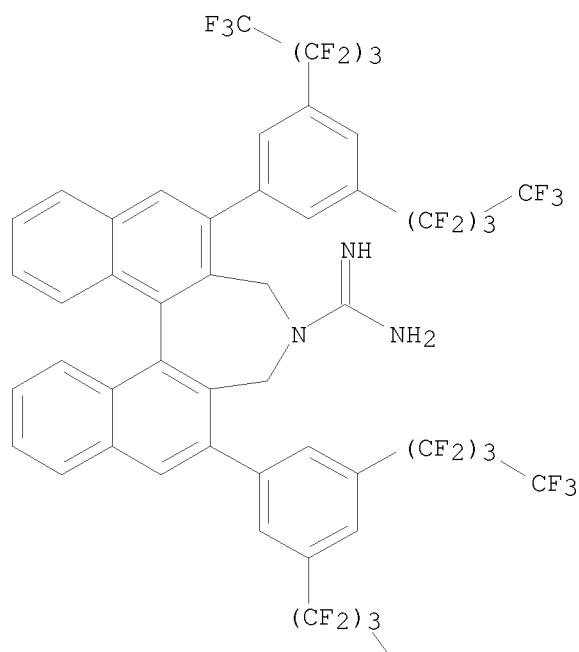


RN 862889-20-1 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
2,6-bis([1,1'-biphenyl]-4-yl)-3,5-dihydro-, (11bR)- (CA INDEX NAME)



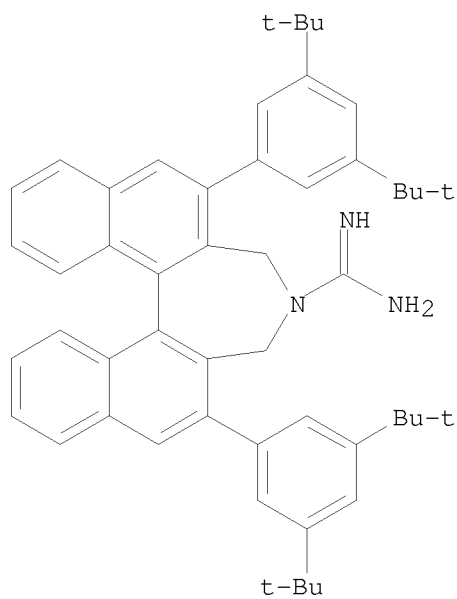
RN 862889-21-2 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 2,6-bis[3,5-bis(phenyl)phenyl]-3,5-dihydro-, (11bR)-(9CI) (CA
 INDEX NAME)

PAGE 1-A



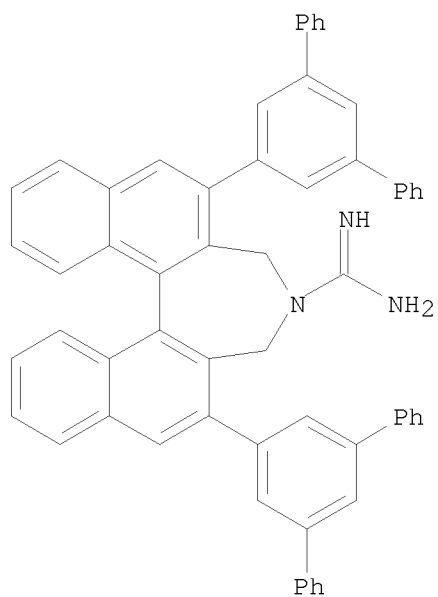


RN 862889-22-3 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 2,6-bis[3,5-bis(1,1-dimethylethyl)phenyl]-3,5-dihydro-, (11bR)- (9CI) (CA
 INDEX NAME)

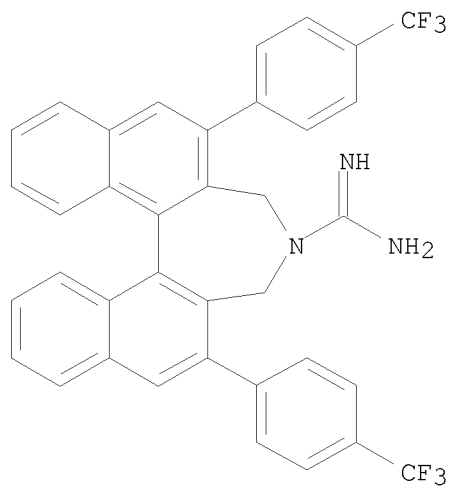


RN 862889-23-4 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 3,5-dihydro-2,6-bis([1,1':3',1''-terphenyl]-5'-yl)-, (11bR)- (CA INDEX
 NAME)

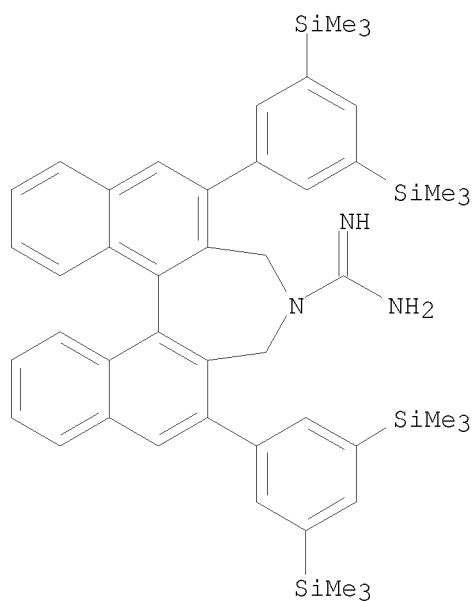
10/589,814



RN 862889-24-5 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
3,5-dihydro-2,6-bis[4-(trifluoromethyl)phenyl]-, (11bR)- (9CI) (CA INDEX
NAME)

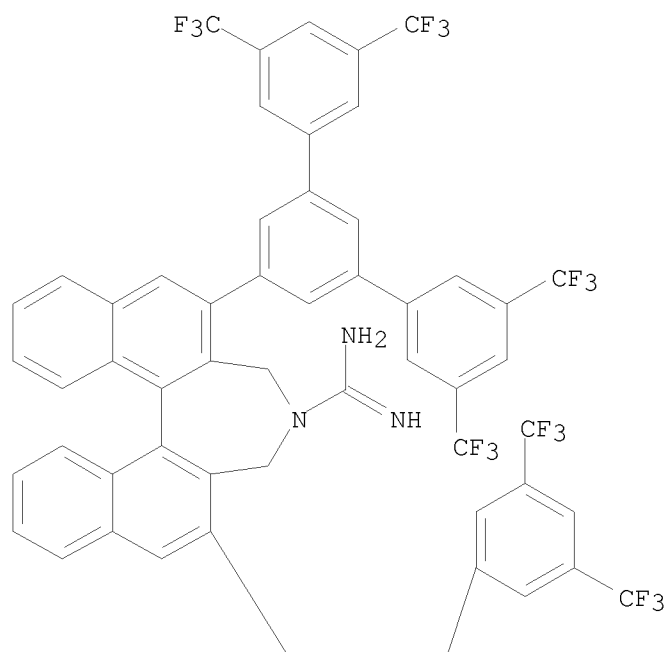


RN 862889-25-6 CAPLUS
CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
2,6-bis[3,5-bis(trimethylsilyl)phenyl]-3,5-dihydro-, (11bR)- (9CI) (CA
INDEX NAME)

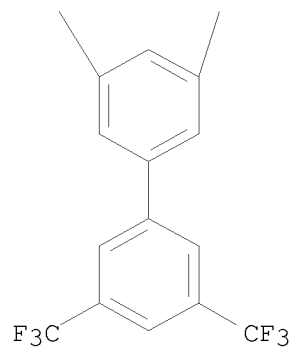


RN 862889-26-7 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 3,5-dihydro-2,6-bis[3,3'',5,5''-tetrakis(trimethylsilyl)[1,1':3',1''-
 terphenyl]-5'-yl]-, (11bR)-(9CI) (CA INDEX NAME)

PAGE 1-A

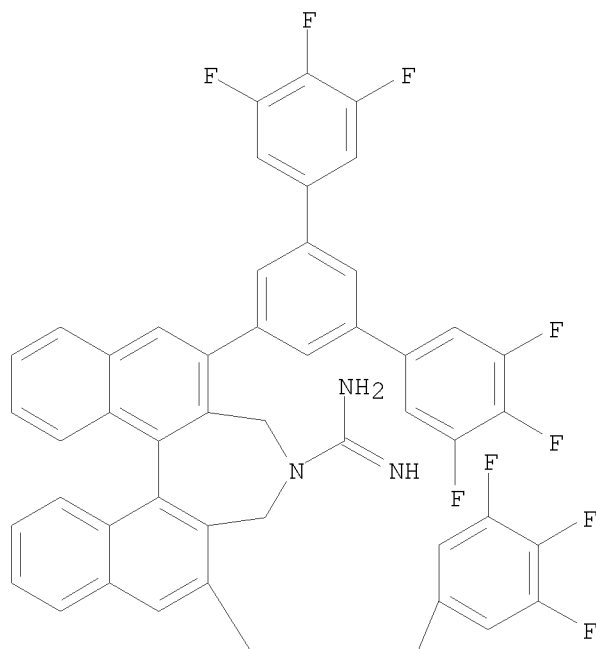


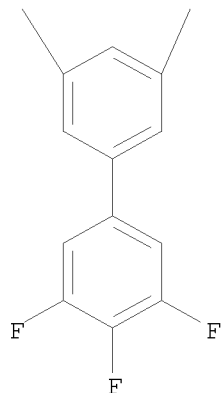
PAGE 2-A



RN 862889-27-8 CAPLUS
 CN 4H-Dinaphth[2,1-c:1',2'-e]azepine-4-carboximidamide,
 2,6-bis(3,3'',4,4'',5,5''-hexafluoro[1,1':3',1''-terphenyl]-5'-yl)-3,5-
 dihydro-, (11bR)- (9CI) (CA INDEX NAME)

PAGE 1-A





OS.CITING REF COUNT:	5	THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT:	23	THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:30561 CAPLUS

DOCUMENT NUMBER: 141:225438

TITLE: Reaction of fullerene C60 with
2-azido-4,6-diphenylpyrimidineAUTHOR(S): Romanova, I. P.; Yusupova, G. G.; Yakhvarov, D. G.;
Larionova, O. A.; Mochulskaya, N. N.; Sidorova, L.
P.; Charushin, V. N.; Zverev, V. V.; Sinyashin, O. G.CORPORATE SOURCE: A. E. Arbuzov Institute of Organic and Physical
Chemistry, Kazan Research Center of the Russian
Academy of Sciences, Kazan, 420088, RussiaSOURCE: Russian Chemical Bulletin (Translation of Izvestiya
Akademii Nauk, Seriya Khimicheskaya) (2003), 52(10),
2171-2174

CODEN: RCBUEY; ISSN: 1066-5285

PUBLISHER: Kluwer Academic/Consultants Bureau

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:225438

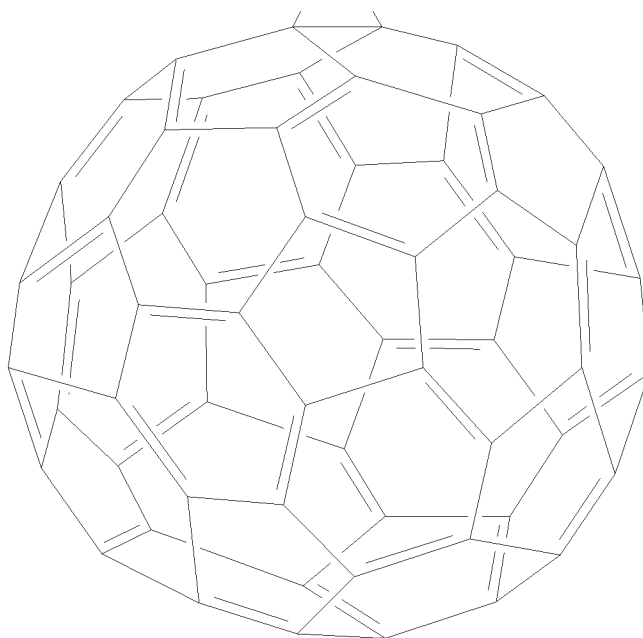
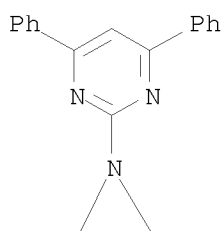
AB The first representative of the pyrimidine-substituted
[60]fullereno[1,2-b]aziridines was synthesized by the reaction of
fullerene C60 with 2-azido-4,6-diphenylpyrimidine.
2-(Azahomo[60]fullereno)-4,6-diphenylpyrimidine was found to be formed as
a byproduct. The electrochem. and MO properties of the adducts were
studied.

IT 745794-90-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of substituted fullerenoaziridines via reaction of fullerene
C60 with azidodiphenylpyrimidine and their electrochem. and MO
properties)

RN 745794-90-5 CAPLUS

CN 1'H-[5,6]Fullereno-C60-1h-[1,9-b]azirine, 1'-(4,6-diphenyl-2-pyrimidinyl)-
(9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:125843 CAPLUS

DOCUMENT NUMBER: 139:164691

TITLE: Reactions of [60]fullerene with 2-azidopyrimidines

AUTHOR(S): Romanova, I. P.; Kalinin, V. V.; Nafikova, A. A.;
Yakhvarov, D. G.; Zverev, V. V.; Kovalenko, V. I.;
Rusinov, G. L.; Plekhanov, P. V.; Charushin, V. N.;
Sinyashin, O. G.CORPORATE SOURCE: A. E. Arbuzov Institute of Organic and Physical
Chemistry, Kazan Research Center of the Russian
Academy of Sciences, Kazan, 420088, RussiaSOURCE: Russian Chemical Bulletin (Translation of Izvestiya
Akademii Nauk, Seriya Khimicheskaya) (2003), 52(1),
173-178

CODEN: RCBUEY; ISSN: 1066-5285

PUBLISHER: Kluwer Academic/Consultants Bureau

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:164691

AB The reaction of [60]fullerene with 2-azido-5-nitropyrimidine or
2-azidopyrimidine affords fullerenoimidazopyrimidines, whose electron
affinity is higher than that of non-modified C60. Formation enthalpy,
relative energy, electron affinity, reduction potential of these adducts thus
prepared were determined through the AM1 (MO) and PM3 (MO) methods and obtained
from the first wave potentials of the electrochem. reduction of fullerene-C60
and its derivs.

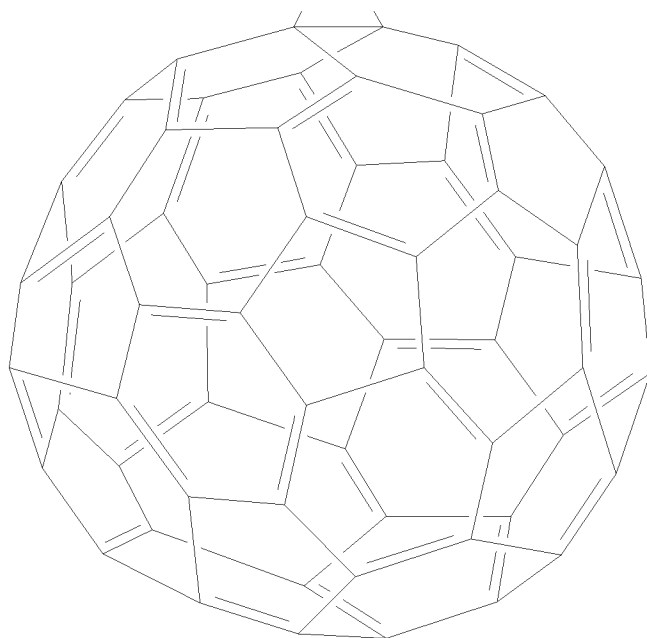
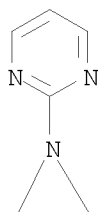
IT 574002-44-1

RL: PRP (Properties)

(reaction of [60]fullerene with 2-azidopyrimidines)

RN 574002-44-1 CAPLUS

CN 1'H-[5,6]Fullereno-C60-1h-[1,9-b]azirine, 1'-(2-pyrimidinyl)- (CA INDEX
NAME)

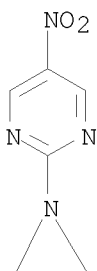


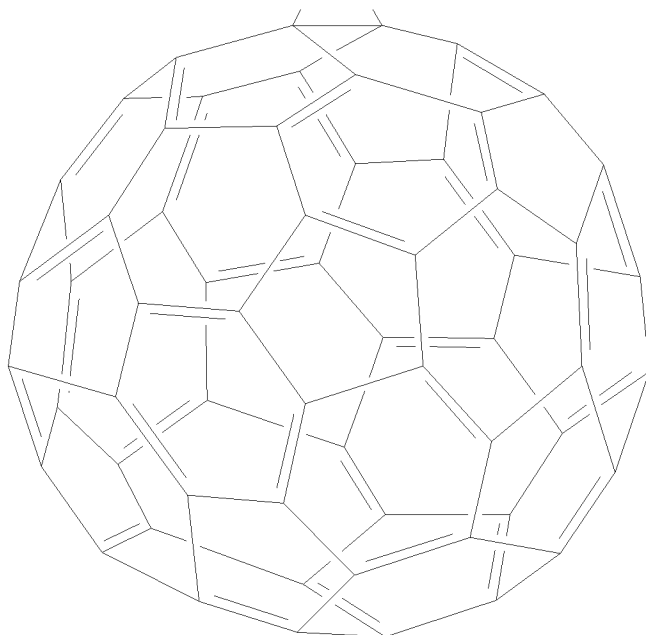
IT 574002-41-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

10/589,814

(reaction of [60]fullerene with 2-azidopyrimidines)
RN 574002-41-8 CAPLUS
CN 1'H-[5,6]Fullereno-C60-Ih-[1,9-b]azirine, 1'-(5-nitro-2-pyrimidinyl)- (CA
INDEX NAME)

PAGE 1-A





OS.CITING REF COUNT:	7	THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
REFERENCE COUNT:	14	THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:7348 CAPLUS

DOCUMENT NUMBER: 112:7348

ORIGINAL REFERENCE NO.: 112:1439a,1442a

TITLE: Synthesis and biological activity of
dibenz[c,e]azepines

AUTHOR(S): Aboul-Enein, Hassan Y.; Ibrahim, Said E.; Khalifa, M.

CORPORATE SOURCE: Coll. Pharm., King Saud Univ., Riyadh, 11451, Saudi
ArabiaSOURCE: Drug Design and Delivery (1988), 4(1), 27-33
CODEN: DDDEEJ; ISSN: 0884-2884

DOCUMENT TYPE: Journal

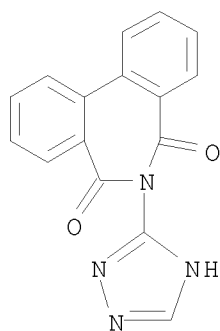
LANGUAGE: English

AB Synthesis and pharmacol. screening of 68 dibenz[c,e]azepines are
described. All were inactive as antidepressant agents, but two compds.
showed good anticonvulsant activity. The structure-activity relationships
of this class of compds. are discussed.

IT 124214-32-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and hydride reduction of, dibenzazepine by)

RN 124214-32-0 CAPLUS

CN 5H-Dibenz[c,e]azepine-5,7(6H)-dione, 6-(1H-1,2,4-triazol-5-yl)- (CA INDEX
NAME)

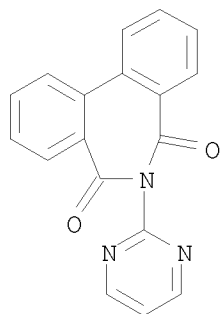
IT 124214-29-5P 124214-50-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

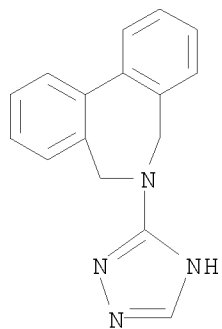
RN 124214-29-5 CAPLUS

CN 5H-Dibenz[c,e]azepine-5,7(6H)-dione, 6-(2-pyrimidinyl)- (CA INDEX NAME)

10/589,814



RN 124214-50-2 CAPLUS
CN 5H-Dibenz[c,e]azepine, 6,7-dihydro-6-(1H-1,2,4-triazol-5-yl)- (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
(3 CITINGS)

L5 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1983:125269 CAPLUS

DOCUMENT NUMBER: 98:125269

ORIGINAL REFERENCE NO.: 98:19071a,19074a

TITLE: A carbon-13 NMR assignment study of certain
6-substituted dibenz[c,e]azepine-5,7-dione

AUTHOR(S): Ibrahim, Said E.; Aboul-Enein, Hassan Y.; Khalifa, M.

CORPORATE SOURCE: Coll. Pharm., King Saud Univ., Riyadh, Saudi Arabia

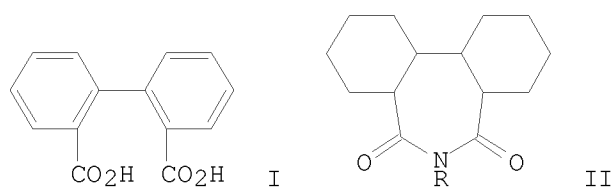
SOURCE: Spectroscopy Letters (1982), 15(7), 575-81

CODEN: SPLEBX; ISSN: 0038-7010

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB The natural abundance ^{13}C NMR of I and II ($\text{R} = m\text{-CF}_3\text{C}_6\text{H}_4$, 2-pyridyl, morpholino, 1,2,4-triazol-3-yl) are observed using the Fourier transform technique. The ^{13}C chemical shifts are assigned on the basis of chemical shift theory, the observed signal multiplicity in the single frequency off-resonance decoupled spectra, and comparison with the chemical shifts of the model compds.

IT 84679-66-3

RL: PRP (Properties)
(carbon-13 NMR of)

RN 84679-66-3 CAPLUS

CN 5H-Dibenz[c,e]azepine-5,7(6H)-dione, 6-(3H-1,2,4-triazol-3-yl)- (CA INDEX NAME)

